PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of an existing Traffic Control Signal with interconnect at the intersection of MD 528 (Coastal Hwy.) and 48th Street in Ocean City, Worcester County. The existing interconnect cable to the north shall be pulled back and rerouted into the proposed cabinet. The proposed interconnect south to 45th Street is being installed as part of the MD 528 @ 45th Street project. MD 528 is assumed to run in a north-south direction.

II. INTERSECTION OPERATION

- 1. The intersection will continue to operate in a NEMA six-phase, semitraffic-actuated mode, Video detector cameras shall now provide the actuation. The MD 528 approaches shall continue running concurrently with Exclusive/Permissive left turns. A pedestrian phase with pushbutton actuation shall be provided across the south leg of MD 528 (Coastal Hwy). The pedestrian phase across the north leg of the intersection shall remain in operation. The 48th Street approaches shall remain concurrent.
- 2. A full-traffic-actuated, eight-phase ASC'S II controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The existing traffic signals shall be turned off and removed prior to the installation of the proposed equipment. The proposed equipment shall be installed in some of the locations of the existing equipment.
- 2. All field wiring to the existing controller cabinet shall be disconnected by the contractor. Mr. Ed Rodenhizer (SHA Signal Shop) shall be contacted at 410-787-7650, seventy-two hours in advance of intended work. The controller and associated equipment shall be removed by the Signal Shop personnel.
- 3. The sprinkler system cabinet shall be relocated by others at the intersection of 48th Street. The contractor shall contact Ocean City's Recreation and Parks.

EQUIPMENT LIST

| Α. | EQUIPMENT | TO E | BE | SUPPL | IED | BY | S.H.A | ١ |
|----|-----------|------|----|-------|-----|----|-------|---|

| | · | | |
|-------------|---|------|------|
| ITEM NO. | DESCRIPTION | QUAN | TITY |
| 9081 | Eight-phase, full-traffic actuated, solid state digital controller with ASCII II and all necessary equipment and harnesses housed in a NEMA size "6" base-mounted cabinet. | 1 | EA |
| 9089 | Sheet aluminum signs to consist of: | 70.5 | SF |
| | R10—12 "LEFT TURN YIELD ON GREEN (BALL)" sign, (36" x 42") mast arm mounted. | 2 | EA |
| | R3-17 mod "RIGHT LANE, BUSES AND, RIGHT, TURNS, ONLY" sign (30 "x 42 ") mast arm mounted. | 2 | EA |
| | R9-1 mod "YIELD, TO PED" sign, (48" x 48") mast arm mounted. | 2 | EA |
| 9090 | Sheet aluminum signs to consist of: (Blue or Green) | 37 | SF |
| | D3-2 "Coastal HWY" sign, (variable x 16") mast arm mounted. | 2 | EA |
| | D3-2 "48th Street(arrow) / (arrow) 48th Street" dual faced sign (variable x 16") mast arm mounted. | 2 | EA |

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

| ITEM NO. | DESCRIPTION | QUAN | TITY |
|-------------|--|------|------|
| 1001 | Maintenance of traffic per assignment. | 3 | EA |
| 2001 | Class 2 Excavation. | 19 | C.Y. |
| 2002 | Test Pit Excavation | 5 | C.Y. |
| 5004 | 12" white heat applied permanent preformed thermoplastic pavement marking. | 770 | L.F. |
| 6001 | Furnish and install depressed curb and gutter. | 15 | L.F. |
| 6004 | 4" concrete sidewalk. | 570 | S.F. |
| 8001 | Pre-manufactured camera to controller (250' length) cable | 2 | EA |
| 8003 | Pre-manufactured camera to controller (500' length) cable | 2 | EA |
| 8010 | Furnish and install 12" pedestrian signal head section | 8 | EA |
| 8011 | Furnish and install 12" vehicular traffic signal head section | 32 | EA |
| 8015 | Furnish and install 3" weatherhead. | 2 | EA |
| 8019 | Furnish and install 8" vehicular traffic signal head section. | 9 | EA |

EQUIPMENT LIST (CONT.)

| В. | EQUIPMENT TO BE FURNISHED AND/OR | INSTALLED BY | THE CONTRACTOR. |
|-------------|---|--------------|-----------------|
| ITEM NO: | DESCRIPTION | QUAI | NTITY |
| 8020 | Furnish and install control and distribution equipment (120/240 V, 1 phase 3 wire system). | 1 | EA T |
| 8030 | Furnish and install breakaway pedestal pole (10′). | 2 | EA |
| 8032 | Pedestrian pushbutton and R10-4(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS CDASTAL HWY".) | 4 | EA |
| 8037 | Furnish and install 18' special steel pole with twin 60'/50' mast arm (60' arm hase 15' T and 50' arm has 16.5' T). | 2 | EA |
| 8047 | Remove and dispose of existing foundation 12" below grade. | 2 | EA |
| 8048 | Remove and dispose of existing material and equipment per assignment. | 1 | EA |
| 8049 | Furnish and install video detector camera. | 4 | EA |
| 8050 | Furnish and install video detection interface equipment. | 1 | EA |
| 8051 | Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit – trenched | 1 45 | L.F. |
| 8053 | Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit – trenched. | 55 | L.F. |
| 8057 | Furnish and install concrete for signal foundation. | 14 | C.Y. |
| 8060 | Furnish and install No. 6 AWG stranded bare copper ground wire. | 535 | L.F. |
| 8067 | Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - slotted. | 1 220 325 | L.F. |
| 8070 | Furnish and install electrical cable 1-conductor No. 4 AWG THHN/THWN. | 40 | L.F. |
| 8072 | Furnish and install electrical handhole. | 1 5 | EA |
| 8075 | Install overhead sign. | 107.5 | S.F. |
| 8080 | Furnish and install ground rod $-\frac{3}{4}$ " x 10'. | 4 | EA |
| 8082 | Furnish and install electrical cable – 2 conductor (No. 14 AWG). | 450 | L.F. |
| 8083 | Furnish and install electrical cable – 3 conductor (No. 14 AWG). | 465 | L.F. |
| 8084 | Furnish and install electrical cable - 5 conductor (No. 14 AWG). | 160 | L.F. |
| 8085 | Furnish and install electrical cable – 7 conductor (No. 14 AWG). | 1330 | L.F. |
| 8091 | Furnish and install 2" schedule 80 rigid polyvinyl chloride - trenched | 15 | L.F. |
| 8093 | Install controller and cabinet base mount. | 1 | EA |
| Neg. | Remove and replace brick pavers for the installation of signal equipment. | 35 | S.F. |
| Neg. | Pull back and reroute existing I/C cable. | 240 | L.F. |
| Neg. | Furnish and install x" 2" 1 electrical conduit – polyvinyl chloride riser. | 30 | L.F. |
| Neg. | Remove and dispose of existing foundation 48" below grade. | 2 | EA |

C. EQUIPMENT TO BE REMOVED.

SHA Forces shall remove the controller and all auxiliary equipment from the controller cabinet. The cabinet and all other materials to be removed by the contractor shall become the property of the contractor.

PHASE CHART

The following contact persons for District #1 are as follows:

Mr. Donnie L. Drewer District Engineer Phone: (410) 677–4006

Mr. Gene Cofiell Assistant District Engineer - Traffic Phone: (410) 677-4040

Mr. Jimmy Wright Assistant District Engineer – Maintenance Phone: (410) 543–6715

Mr. Bruce Poole Assistant District Engineer – Utility Phone: (410) 677–4082

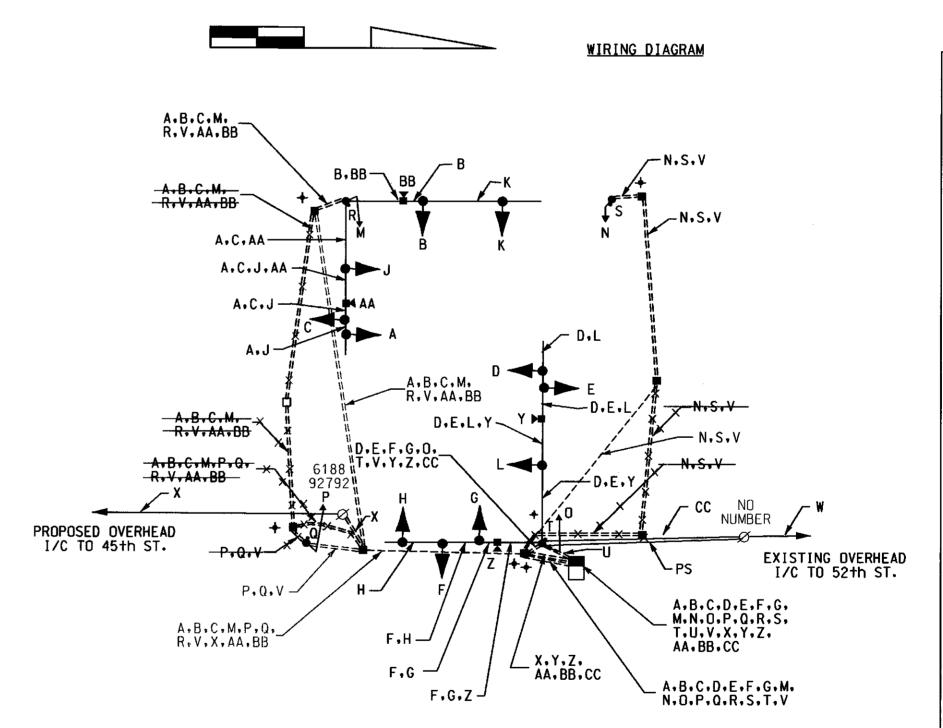
Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787–7630

The power company representative is:

Conectiv Power
Mr. Wade Willy, Customer Enginner
P.O. Box 1739
Salisbury, Maryland 21802-1739
1-410-860-6380

| PHASE 1 & 5 | 4 -G∕R | 4 -G-/R | R | G−/R | ∢ G-⁄R | R | R | R | R | R | R | DW | DW | DW | DW | <u> </u> |
|-----------------------|----------------|------------------|---------|----------------|----------------|------|------|------|------|------|------|-------|-------|--------|------------|--------------|
| CHANGES TO PHASES 1 | & 6, 2 | & 5 0 | R 2 & 6 | - | | | | | | | • | | | | | |
| PHASE 1 & 6 | 4 -G-/G | 4 -G/G | G | R | R | R | R | R | R | R | R | DW | DW | DW | DW | _ ⊢ |
| 1 & 6 CHANGE | ← Y/G | 4 -Y-/G | G | R | R | R | R | R | R | R | R | D₩ | DW | DW | D W | 1 → _ |
| PHASE 2 & 5 | R | R | R | 4 -G-/G | ∢ -G-/G | G | R | R | R | R | R | DW | DW | D₩ | DW | <u> </u> |
| 2 & 5 CHANGE | R | R | R | 4 Y-/G | ← Y-/G | G | R | R | R | R | R | DW | DW | DW | DW | |
| PHASE 2 & 6 | G | G | G | G | G | G | R | R | R | R | R | DW | DW | D₩ | DW | |
| 2 & 6 CHANGE | Y | Y | Y | · Y | Y | Y | R | R | R | R | R | DW | DW | DW | D₩ | +- 7 |
| PHASE 4 & 8 | R | R | R | R | R | R | G | G | G | G | G | DW | D₩ | DW | D₩ | ↓ , |
| 4 & 8 CHANGE | R | R | R | R | R | R | Y | Y | Y | Y | Y | DW | DW | DW | D₩ | - ↑ |
| PHASE 4 & 8 ALT | R | R | R | R | R | R | G | G | G | G | G | WK | WK | WK | WK | * |
| PED CLEARANCE | R | R | R | R | R | R | G | G | G | G | G | FL/DW | FL/DW | FL/DW | FL/DW | |
| 4 & 8 ALT CHANGE | R | R | R | R | R | R | Y | Y | Y | Υ | Y | DW | Ð₩ | DW | D₩ | 1 -1 |
| FLASHING OPERATION | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | DARK | DARK | DARK . | DARK | + + |

MD 528 AT 48+h STREET



A
B
C
D
T-CONDUCTOR ELECTRICAL
CABLE (NO. 14 A.W.G)

WIRING KEY

5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G)

3-CONDUCTOR ELECTRICAL
CABLE (NO. 14 A.W.G)

P 2-CONDUCTOR ELECTRICAL S CABLE (NO. 14 A.W.G)

U - NO. 4 A.W.G) ELECTRICAL CABLE THWN/THNN

V - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)

W - EXISTING INTERCONNECT CABLE SELF-SUPPORTING

X - 12 PAIR VOICE GRADE I/C CABLE; SELF-SUPPORTING (PAID FOR UNDER THE MD 528 @ 45TH STREET PROJECT)

Y } 250' PREMANUFACTURED CAMERA TO CONTROLLER CABLE

AA } 500' PREMANUFACTURED BB } CAMERA TO CONTROLLER CABLE

CC - RELOCATED INTERCONNECT CABLE; SELF-SUPPORTING

DECEMBER OF THE

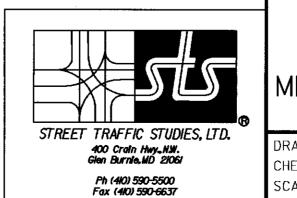
PS - PROPOSED OVERHEAD SERVICE TO BE INSTALLED BY CONECTIV

F 230

+ - GROUND ROD

1 REDLINE REVISION 10/4/03

4005g12.DGN



TASK-18 DATE:

10-22-01

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Troffic & Sofety TRAFFIC ENGINEERING DESIGN DIVISION

MD 528(COASTAL HWY) AND 48th STREET

DRAWN BY: EMM F.A.P. NO. TS NO. CHECKED BY: RRZ S.H.A. NO. XX 1065185 SCALE: NONE COUNTY: WORCESTER T.I.M.S. NO. COUNTY: WORCESTER

LOG MILE: